

ABSTRACT

Examples including non-volatile semiconductor memory devices in which digitized image data and voice data can be more efficiently written and read, and methods for manufacturing the same, are described. In one example, a non-volatile semiconductor memory device 300 may include a first memory element 100 and a second memory element 200 formed in a wafer 11 and mutually isolated by an element isolation region 38, a first impurity diffusion layer 16 and a second impurity diffusion layer 14. The first and second memory elements 100 and 200 include gate dielectric layers 20 and 120, floating gates 22 and 122, selective oxide dielectric layers 24 and 124 and third impurity diffusion layers 15 and 25, respectively, and also include a common intermediate dielectric layer 26 and a common control gate 28, and connected to the first and second impurity diffusion layers 16 and 14 that are commonly shared.